

- Regeneration of water from urine on space craft -  
using preserving agent with flushing water and  
evaporating at atmospheric pressure using capillary  
porous membranes.

L20 ANSWER 93 OF 121 WPINDEX COPYRIGHT 2002 DERWENT INFORMATION LTD  
AN 1996-249871 [25] WPINDEX  
DNN N1996-210029  
DC Q25  
IN BOBE, L S; BOCHAROV, S S; GUROVSKII, D N  
PA (CHEQ-R) CHEM EQUIP RES INST STOCK CO; (MONI-R) MOSC NIIKHIMMASH RES PRODN  
ASSOC  
CYC 1  
PI RU 2046080 C1 19951020 (199625)\* 7p  
ADT RU 2046080 C1 RU 1992-7634 19921124  
PRAI RU 1992-7634 19921124  
AN 1996-249871 [25] WPINDEX  
AB RU 2046080 C UPAB: 19960625

The urine is collected and preserved with the aid of a preserving agent  
and flushing water, and extracting the water by evaporation at atmospheric  
pressure and at a temperature not above 60 deg.C with the aid of porous  
capillary polymer **membranes**, sorption-catalytic **cleaning**  
and disinfecting before storing for use as drinking water.

For each dose of the preserving agent two doses of flushing water are  
used, one together with the preserving agent and the other without it. The  
evaporation is carried out in a closed circuit, and gas produced during  
heating is removed at the same time as filtering. The evaporation of water  
extracted from the urine on the surface of the porous capillary membrane  
is carried out by a continuous circulating **air flow**.

ADVANTAGE - More effective cleaning and higher condensate quality.

Bul. 29/20.10.95

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